

Kansas State Fire Marshal – Fire Prevention Division

References (s): 06-IFC/906, 07-10

Page 1 of 2



FIRE FACT 067 – FIRE EXTINGUISHER

Classification of portable extinguishers - Portable extinguishers are rated for effectiveness and the types of fires it will extinguish. Some extinguishers can be used on multiple types of fires while others are only effective on a specific type. The classifications are:

- A – ordinary combustibles
- B – flammable liquids
- C – electrical
- D – combustible metals
- K – cooking appliances

The classification of extinguishers consists of a NUMERAL, such as “2,” that indicates the relative extinguishing effectiveness, followed by a LETTER for the class of fire.

This agency recommends that an extinguisher with a minimum of a 2A UL rating be used in all but high hazard areas of a structure. In high hazard areas where Class B flammable materials are used or stored in above normal quantities, extinguishers with a minimum of a 2A 10BC rating should be installed unless otherwise indicated. A Class K fire extinguisher is required in locations where there is a potential for fire involving combustible cooking media (vegetable oil or fats).

Recommendations for Fire Extinguisher Use - Portable fire extinguishers should only be used after the fire alarm for the building has been sounded, after full or partial building evacuation has begun, and after the fire department has been called. Only the proper extinguisher classification should be used. Serious injury or death could occur if the wrong fire extinguisher is used to try to put out a fire. Extinguishers should only be used by individuals trained in its use and on small, contained fires such as trash cans, electrical boxes, and kitchen or small equipment. Personnel should be trained in the proper use of the extinguisher.

Placement of Extinguishers – The actual placement of fire extinguishers can best be accomplished through a physical survey of the area to be protected. Fire extinguishers shall be located where they are visible, readily accessible, immediately available, and along all normal paths of travel.

Distribution of Fire Extinguishers - Portable fire extinguishers are most effectively utilized when they are readily available in sufficient number and with adequate extinguishing capacity for use by persons familiar with their operation.

Travel distance is the actual distance the user of the extinguisher will need to walk. Consequently, travel distance will be affected by partitions, location of doorways, aisles, piles of stored materials, machinery, desks, tables, and other items. For most occupancies the travel distance to a fire extinguisher shall not exceed 75 feet unless in high hazard areas. In high hazard areas, such as wood or metal shops or chemistry laboratories, the travel distance shall be no more than 50 feet.

Installation – All portable, non-wheeled extinguishers shall be installed according to the following:

- Secured or bracketed to the wall
- Placed inside an unlocked fire extinguisher cabinet or wall recess
- 40lbs or less: Top of the extinguisher is not more than 5ft above floor
- Greater than 40lbs: Top of the extinguisher is not more than 3.5ft above the floor
- Bottom of extinguisher to the floor shall not be less than 4 in.

Kansas State Fire Marshal – Fire Prevention Division

Inspection - An inspection is a "quick check" that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. All extinguishers shall be inspected when initially placed in service and thereafter at approximately 30-day intervals. The date of the inspection and the initials of the person performing the inspection shall be recorded. This type of an inspection may be performed by facility personnel without being certified by the Kansas State Fire Marshal.

Annual Maintenance – Extinguishers shall be subjected to maintenance not more than one year apart or when specifically indicated by an inspection. Maintenance procedures shall include a thorough examination of the mechanical parts, the extinguishing agent, and the expelling means. *Annual maintenance may only be performed by personnel of a firm certified by the Kansas State Fire Marshal.*

Six Year Maintenance - Every six years, stored pressure extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures. When the applicable maintenance procedures are performed during periodic recharging or hydrostatic testing, the six-year requirement shall begin from that date. *Six year maintenance may only be performed by personnel of a firm certified by the Kansas State Fire Marshal.*

Hydrostatic Testing - All refillable fire extinguishers require hydrostatic testing at intervals that vary according to the type of extinguisher. Hydrostatic testing is required for all stored pressure extinguishers every 12 years, for stored pressure water or foam type extinguishers every 5 years and carbon dioxide (CO₂) extinguishers every 5 years. CO₂ type extinguishers may only be tested by a firm with a DOT-certified test station. *Hydrostatic testing shall be performed by personnel of firms certified by the Kansas State Fire Marshal, trained in pressure testing procedures and safeguards, having suitable testing equipment, facilities, and appropriate servicing manuals.*

Maintenance Tag – We get several questions regarding the use of the maintenance tag. The Kansas State Fire Marshal's Office does not require that the inspection and testing be documented on the tag itself. Rather it's more important to maintain the documentation in whatever format works best for safekeeping and quick reference. So if your facility has trouble with maintaining the tags, it is acceptable to remove the tag and keep the documentation elsewhere as long as the documentation is kept at each building.